



# THE WALL-MOUNT™ AIR CONDITIONERS (50HZ)

**Models W24A to W70A and W24L to W70L**  
**21,200 Btuh (6.21 KW) – 59,000 Btuh (17.28 KW)**  
**Right Side Control Panel 50Hz**

**GREEN REFRIGERANT**  
**R-410A**

The Bard Wall-Mount Air Conditioner is a self contained energy efficient system, which is designed to offer maximum indoor comfort at a minimal cost without using valuable indoor floor space or outside ground space. This unit is the ideal product for versatile applications such as: new construction, modular offices, school modernization, telecommunication structures, portable structures or correctional facilities. Factory or field installed accessories are available to meet specific job requirements.

## Engineered Features

### Aluminum Finned Copper Coils:

Grooved tubing and enhanced louvered fin for maximum heat transfer and energy efficiency.

### Twin Blowers:

Move air quietly. Most models feature multispeed blower motors providing airflow adjustment for high and low static operation. Motor overload protection is standard on all models.

### Air Conditioner Compressor:

Scroll Compressors eliminate need for crankcase heater. Standard on all models.

### R-410A Refrigerant:

Designed with R-410A (HFC) non-ozone depleting refrigerant in compliance with the Montreal protocol and 2010 EPA requirements.

### Phase Rotation Monitor:

Standard on all 3 phase scroll compressors. Protects against reverse rotation if power supply is not properly connected.

### Galvanized 20 Gauge Zinc Coated Steel Cabinet:

Cleaned, rinsed, sealed and dried before the polyurethane primer is applied. The cabinet is handsomely finished with a baked on textured enamel, which allows it to withstand 1000 hours of salt spray tests per ASTM B117-03.

### Foil Faced Insulation:

Standard on all units.

### Full Length Mounting Brackets:

Built into cabinet for improved appearance and easy installation. NOTE: Bottom mounting bracket included to assist in installation.

### Electrical Components:

Are easily accessible for routine inspection and maintenance through a right side, service panel opening. Features a lockable, hinged access cover to the circuit breaker or toggle disconnect switch.

### Electric Heat Strips:

Features an automatic limit and thermal cut-off safety control. Heater packages can be factory or field installed for all 1½ through 6 ton models.

### Filter Service Door:

Separate service door provides easy access for filter change.

### One Inch, Disposable Air Filters:

Are standard equipment. Optional one inch washable filters available and filter racks permit the addition of 2" pleated filter. Factory or field installed.

### Condenser Fan and Motor

#### Shroud Assembly:

Slides out for easy access.

### Barometric Fresh Air Damper:

Standard on all units. Allows up to 25% outside fresh air. Optional ventilation packages available.

### Built-in Circuit Breakers:

Standard on all electric heat versions of single (230/208 volt) and three phase (230/208 volt) equipment. Toggle disconnects are standard on all electric heat versions of three phase (460 volt) equipment.

### Slope Top:

Standard feature for water run-off.

### Top Rain Flashing:

Standard feature on all models.



### Liquid Line Filter Drier:

Standard on all units. Protects system against moisture.

### Compressor Control Module:

Standard on all units. Built-in off-delay timer adjustable from 30 seconds to 5 minutes. 2-minute on-delay if power interrupt. 120-second bypass for low pressure control, and both soft and manual lockouts for high and low pressure controls. Alarm output for alarm relay.

### High & Low Pressure Switches are Auto-Reset:

Standard on all units. Built-in lockout circuit resets from the room thermostat. Provides commercial quality protection to the compressor.



## Capacity and Efficiency Ratings

MODELS	W24A1 W24L1	W30A1	W36A1 W36L1	W42A1 W42L1	W48A1 W48L1	W60A1 W60L1	W70A1 W70L1
Cooling Capacity Btuh	21,200	26,000	31,200	36,000	41,500	48,500	59,000
Cooling Capacity KW	6.21	7.62	9.14	10.54	12.15	14.20	17.28
EER	9.0	9.0	9.0	9.2	9.0	9.0	9.5

All capacity, efficiency and cost of operation information is based on high speed operation with fresh air cover plate. Cover plate must be ordered separately and is recommended for use to obtain maximum energy efficiency where fresh air is not required.

## Specifications 21,200 Btuh (6.21 KW) — 31,200 Btuh (9.14 KW)

MODELS	W24A1-D	W24A1-F W24L1-F	W30A1-D	W30A1-F	W36A1-D	W36A1-E	W36A1-F W36L1-F
<b>Electrical Rating-50 Hz</b>	240/220 - 1	415/380 - 3⓪	240/220 - 1	415/380 - 3⓪	240/220 - 1	220/200 - 3	415/380 - 3⓪
Operating Voltage Range	198-254	342-456	198-254	342-456	198-254	180-242	342-456
<b>Compressor--Circuit A</b>							
Voltage	240/220	415/380	240/220	415/380	240/220	220/200	415/380
Rated Load Amps	9.4/10.6	4.8/5.0	12.9/14.7	4.8/4.8	15.1/15.8	11.8/13.1	5.8/6.0
Branch Circuit Selection Current	10.9	5.2	14.7	4.8	16.0	13.3	6.0
Lock Rotor Amps	60/60	28/28	67/67	30/30	87/87	95/95	44/44
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
<b>Fan Motor &amp; Condenser</b>							
Fan Motor--HP--RPM	1/5 - 950	1/5 - 950	1/5 - 950	1/5 - 950	1/5 - 950	1/5 - 950	1/5 - 950
Fan Motor--Amps	1.0	1.0	1.5	1.5	1.5	1.5	1.5
Fan--DIA m <sup>3</sup> /s	458/0.66	458/0.66	508/0.86	508/0.86	508/0.86	508/0.86	508/0.86
<b>Blower Motor &amp; Evaporator</b>							
Blower Motor--HP-RPM-SPD	1/5-950-1	1/5-950-1	1/3-950-2	1/3-950-2	1/3-950-2	1/3-950-2	1/3-950-2
Blower Motor--Amps	1.2	1.2	2.2	2.2	2.2	2.2	2.2
m <sup>3</sup> /s Cooling & E.S.P. (pa) w/Filter (Rated-Wet Coil)	0.32/55	0.32/55	0.45/55	0.45/55	0.47/50	0.47/50	0.47/50
Filter Sizes (mm) STD.	405x635x25	405x635x25	405x765x25	405x765x25	405x765x25	405x765x25	405x765x25
<b>Shipping Weight -- Lbs. (Kg)</b>	335 (152)	335 (152)	375 (170)	375 (170)	375 (170)	375 (170)	375 (170)

## Specifications 36,000 Btuh (10.54 KW) — 59,000 Btuh (17.28 KW)

MODELS	W42A1-E	W42A1-F W42L1-F	W48A1-E	W48A1-F W48L1-F	W60A1-E	W60A1-F W60L1-F	W70A1-P W70L1-P
<b>Electrical Rating--50 Hz</b>	220/200-3	415/380-3 ⓪	220/200-3	415/380-3 ⓪	220/200-3	415/380-3 ⓪	400/380-3 ⓪
Operating Voltage Range	180-242	342-456	180-242	342-456	180-242	342-456	342-440
<b>Compressor--Circuit A</b>							
Voltage	220/200	415/380	220/200	415/380	220/200	415/380	400/380
Rated Load Amps	11.0/12.5	5.8/5.8	13.9/15.2	7.1/7.1	13.5/15.2	7.4/7.6	12.2/14.1
Branch Circuit Selection Current	13.2	6.0	15.2	7.1	15.7	7.8	14.1
Lock Rotor Amps	83/83	44/44	98/98	48/48	110/110	52/52	75/75
Compressor Type	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
<b>Fan Motor &amp; Condenser</b>							
Fan Motor--HP-RPM	1/3-825	1/3-825	1/3-825	1/3-825	1/3-825	1/3-825	1/3-950
Fan Motor--Amps	2.5	2.5	2.5	2.5	2.5	2.5	4.0
Fan--DIA. m <sup>3</sup> /s	610/1.01	610/1.01	610/1.01	610/1.01	610/1.01	610/1.01	610/1.01
<b>Blower Motor &amp; Evaporator</b>							
Blower Motor--HP-RPM-SPD	1/2-950-2	1/2-950-2	1/2-950-2	1/2-950-2	1/2-950-2	1/2-950-2	1/2-950-2
Blower Motor--Amps	3.3	3.3	3.3	3.3	3.3	3.3	3.3
m <sup>3</sup> /s Cooling & E.S.P. (pa) w/Filter (Rated-Wet Coil)	0.55/75	0.55/75	0.60/50	0.60/50	0.66/75	0.66/75	0.70/50
Filter Sizes (mm) STD.	508x765x25	508x765x25	508x765x25	508x765x25	508x765x25	508x765x25	508x765x25
<b>Shipping Weight -- Lbs. (Kg)</b>	525 (238)	525 (238)	525 (238)	525 (238)	525 (238)	525 (238)	525 (238)

⓪ 415/380-3 and 400/380-3 electrical ratings are 3-phase wye (star) systems requiring three (3) phase legs plus neutral and ground.

**NOTE:** The indoor & outdoor motors, and 24V transformer primary are connected at 240V derived from one (1) phase leg to neutral. This is internally connected and no field wiring required.

## Ventilation System Packages

Bard Wall-Mounts are designed to provide optional ventilation packages to meet all of your ventilation and indoor air quality requirements. Standard on all units is the barometric fresh air damper. All packages can be ordered built-in at the factory or can be easily field-installed at the time of installation of the Wall-Mount, or can be retrofitted at a later date.



**BAROMETRIC FRESH AIR DAMPER**

### **BAROMETRIC FRESH AIR DAMPER - BFAD**

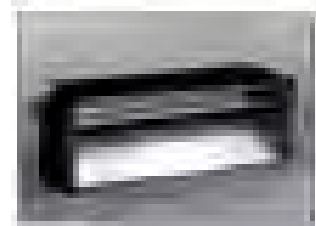
**STANDARD**

The barometric fresh air damper is a standard feature on all models. It is installed on the inside of the service door and allows outside ventilation air, up to 25% of the total airflow rating of the unit, to be introduced through the air inlet openings and to be mixed with the conditioned air. The damper opens during blower operation and closes when the blower is off. Adjustable blade stops allow different amounts of outside air to be introduced into the building and can be easily locked closed if required.

### **BLANK OFF PLATE - BOP**

**OPTIONAL**

A blank off plate is installed on the inside of the service door. It covers the air inlet openings, which restricts any outside air from entering the unit. The blank off plate should be utilized in applications where outside air is not required to be mixed with the conditioned air.



**MOTORIZED FRESH AIR DAMPER**

### **MOTORIZED FRESH AIR DAMPER - MFAD**

**OPTIONAL**

The motorized fresh air damper is internally mounted behind the service door and allows outside ventilation air, up to 25% of the total airflow rating of the unit, to be introduced through the air inlet openings and to be mixed with the conditioned air. The two position damper can be fully open or closed. The damper blade is powered open by a 24VAC motor with spring return on power loss. The damper can be controlled by indoor blower operation or can be field connected to be managed based on building occupancy.

**NOTE:** The above vent systems are intake only without built-in exhaust capability. Building will likely require separate field installed barometric relief or mechanical exhaust elsewhere within the conditioned space. Balancing dampers in the return air grille may be required to achieve specified amount of outdoor air intake.

### **COMMERCIAL ROOM VENTILATOR - CRV**

**OPTIONAL**

The built-in commercial room ventilator is internally mounted behind the service door and allows outside ventilation air, up to 50% of the total airflow rating of the unit, to be introduced through the air inlet openings. It includes a built-in exhaust air damper.



**COMMERCIAL ROOM VENTILATOR**

The commercial room ventilator (CRV) is a simple and innovative approach to improving the indoor air quality by providing fresh air intake and exhaust capability through the CRV. The damper can be easily adjusted to control the amount of fresh air supplied into the building. The CRV can be controlled by indoor blower operation or field controlled based on room occupancy. The CRV is power open - spring return on power loss. Complies with ASHRAE Standard 62.1 "Ventilation for Acceptable Indoor Air Quality."

### **ECONOMIZER - EIFM**

**OPTIONAL**

The built-in economizer system is internally mounted behind the service door and allows outdoor air to be introduced through the air inlet openings. The amount of outdoor air varies in response to the system controls and settings defined by the end user. It includes a built-in exhaust air damper. The economizer is designed to provide "free cooling" when outside air conditions are cool and dry enough to satisfy cooling requirements without running the compressor. This in turn provides lower operating costs, while extending the life of the compressor.



**ECONOMIZER**

#### **Standard Features:**

- One Piece Construction - Easy to install with no mechanical linkage adjustment required.
- Exhaust Air Damper - Built in with positive closed position. Provides exhaust air capability to prevent pressurization of tight buildings.
- Actuator Motor - 24 volt, power open, spring return with built in torque limiting switch.
- Proportioning Type Control - for maximum "free cooling" economy and comfort.
- Moisture Eliminator & Prefilter - permanent, washable aluminum construction.
- Enthalpy Control - adjustable to monitor outdoor temperature and humidity.
- Minimum Position Potentiometer - adjustable to control minimum damper blade position for ventilation purposes.
- Mixed Air Sensor - to monitor outside and return air to automatically modulate damper position.

**Clearances - Inches (mm)  
Required for Service Access and  
Adequate Condenser Airflow**

MODELS	LEFT SIDE	RIGHT SIDE
W24A, W30A, W36A W24L, W36L	15 (380)	20 (510)
W42A, W48A, W60A, W70A W42L, W48L, W60L, W70L	20 (510)	20 (510)

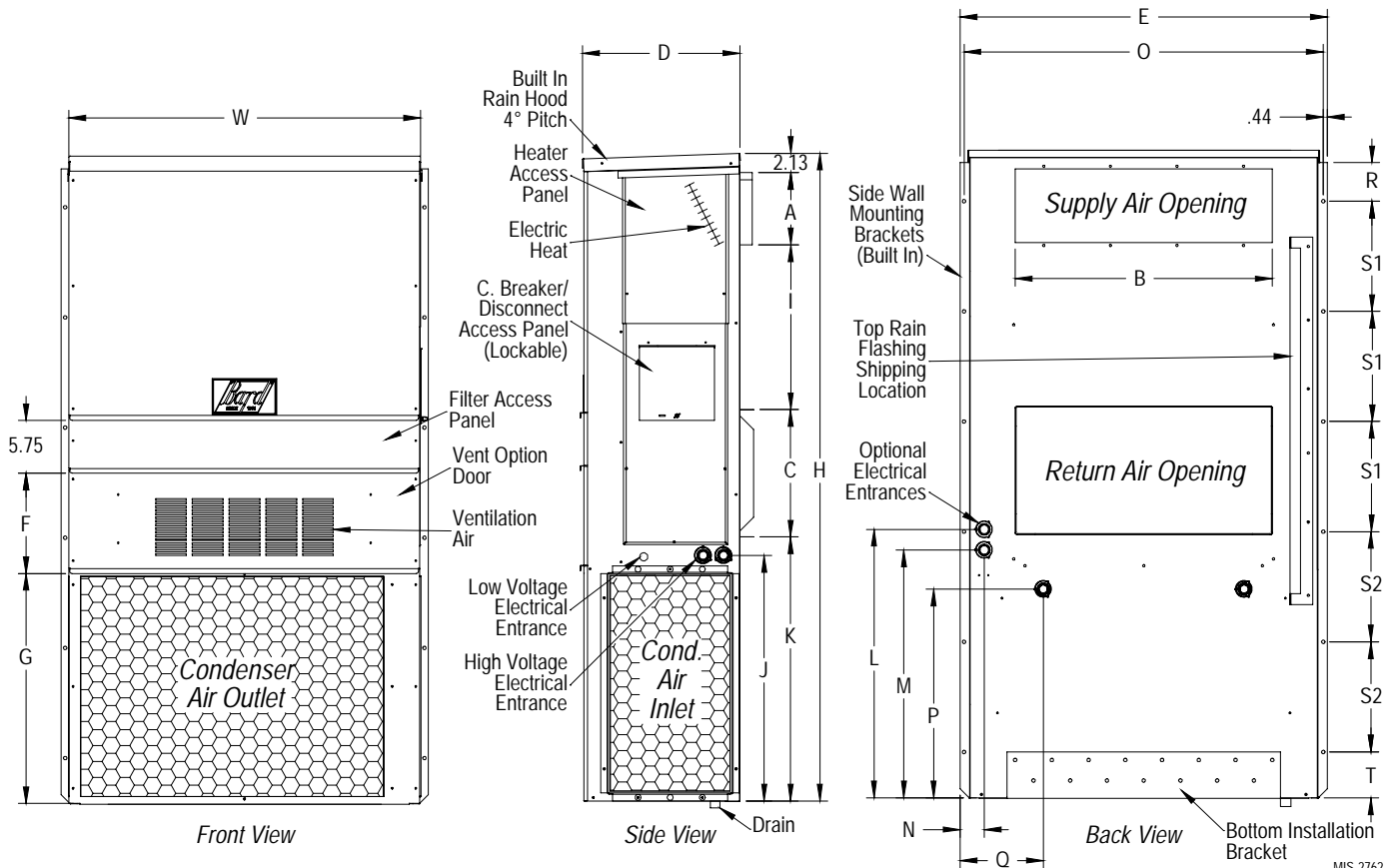
**Minimum Clearances - Inches (mm)  
Required to Combustible Materials**

MODELS ①	SUPPLY AIR DUCT	
	FIRST 3 FEET (1m)	CABINET
W24A, W24L	0	0
W30A, W36A, W36L	.25 (6.35)	0
W42A, W48A, W60A, W70A W42L, W48L, W60L, W70L	.25 (6.35)	0

① Refer to the installation manual for more detailed information.

**Dimensions of Basic Unit for Architectural and Installation Requirements - Inches (mm)**

MODEL	WIDTH (W)	DEPTH (D)	HEIGHT (H)	SUPPLY		RETURN																	
				A	B	C	B	E	F	G	I	J	K	L	M	N	O	P	Q	R	S1	S2	T
W24A, W24L	33.300 (845)	17.125 (435)	70.563 (1792)	7.88 (200)	19.88 (505)	11.88 (302)	19.88 (505)	35.00 (889)	10.88 (276)	25.75 (654)	20.56 (522)	26.75 (680)	28.06 (713)	29.25 (743)	27.00 (686)	2.63 (67)	34.13 (867)	22.06 (560)	10.55 (268)	4.19 (106)	12.00 (305)	12.00 (305)	5.00 (127)
W30A W36A, W36L	38.200 (970)	17.125 (435)	70.563 (1792)	7.88 (200)	27.88 (708)	13.88 (353)	27.88 (708)	40.00 (1016)	10.88 (276)	25.75 (654)	17.93 (455)	26.75 (680)	28.75 (730)	29.25 (743)	27.00 (686)	2.75 (70)	39.19 (996)	22.75 (578)	9.14 (232)	4.19 (106)	12.00 (305)	12.00 (305)	5.00 (127)
W42A, W42L W48A, W48L W60A, W60L	42.075 (1069)	22.432 (570)	84.875 (2156)	9.88 (251)	29.88 (759)	15.88 (403)	29.88 (759)	43.88 (1115)	13.56 (344)	31.66 (804)	30.00 (762)	32.68 (830)	26.94 (684)	34.69 (881)	32.43 (824)	3.37 (86)	42.88 (1089)	23.88 (607)	10.00 (254)	2.00 (51)	16.00 (406)	16.00 (406)	1.88 (48)
W70A, W70L	42.075 (1069)	22.432 (570)	94.875 (2410)	9.88 (251)	29.88 (759)	15.88 (403)	29.88 (759)	43.88 (1115)	13.56 (344)	41.66 (1056)	30.00 (762)	42.68 (1084)	36.94 (939)	44.69 (1135)	42.43 (1078)	3.37 (86)	42.88 (1089)	33.88 (861)	10.00 (254)	2.00 (51)	16.00 (406)	21.00 (533)	1.88 (48)



MIS-2762

## Electrical Specifications

Model	Rated Volts and Phase	Operating Voltage Range	No. Field Power Circuits	② Minimum Circuit Amps	① Maximum External Fuse or Circuit Breaker
W24A1 - D0Z D05 D08	240/220-1	198-254	1 1 1	16 28 44	20 30 45
W24A1 - F0Z W24L1 F05	415/380-3 ③	342-456	1 1	9 11	15 15
W30A1 - D0Z D05 D10	240/220-1	198-254	1 1 1	23 29 55	35 35 60
W30A1 - F0Z F07 F12	415/380-3 ③	342-456	1 1 1	9 15 24	15 15 25
W36A1 - D0Z D05 D10	240/220-1	198-254	1 1 1	24 29 55	35 35 60
W36A1 - E0Z E06 E12	220/200-3	180-242	1 1 1	20 24 40	25 30 40
W36A1 - F0Z W36L1 F07 F12	415/380-3 ③	342-456	1 1 1	11 16 25	15 20 25
W42A1 - E0Z E09 E15	220/200-3	180-242	1 1 1	25 32 53	35 35 60
W42A1 - F0Z W42L1 F07 F14	415/380-3 ③	342-456	1 1 1	14 17 31	20 20 35
W48A1 - E0Z E09 E15	220/200-3	180-242	1 1 1	27 34 53	35 35 50
W48A1 - F0Z W48L1 F07 F14	415/380-3 ③	342-456	1 1 1	15 17 31	20 20 35
W60A1 - E0Z E09 E15	220/200-3	180-242	1 1 1	28 34 53	40 40 60
W60A1 - F0Z W60L1 F07 F14	415/380-3 ③	342-456	1 1 1	16 17 31	20 20 35
W70A1 - P0Z W70L1 P07 P14	400/380-3 ③	342/440	1 1 1	25 25 32	35 35 35

① Maximum size of the time delay fuse or "D" rated circuit breaker for protection of field wiring conductors.

② These "Minimum Circuit Amps" values are to be used for sizing the field power conductors.

③ 415/380-3 and 400/380-3 electrical ratings are 3-phase wye (star) systems requiring three (3) phase legs plus neutral and ground. **NOTE:** The indoor and outdoor motors and 24V transformer primary are connected at 240V derived from one (1) phase leg to neutral. This is internally connected and no field wiring required.

**NOTE:** All wiring must conform to NIC/EIC latest edition.

**IMPORTANT:** While this electrical data is presented as a guide, it is important to electrically connect properly sized fuses & conductor wires in accordance with the National Electrical Code & all local codes.

### Indoor Blower Performance - CFM (m<sup>3</sup>/s) at 220 Volts

ESP in Inches H <sub>2</sub> O (Pa)	W24A, W24L	W30A W36A, W36L		W42A, W42L W48A, W48L		W60A, W60L W70A, W70L	
	<b>Single Speed</b> Dry / Wet Coil	<b>High Speed</b> Dry / Wet Coil	Low Speed Dry / Wet Coil	<b>High Speed</b> Dry / Wet Coil	Low Speed Dry / Wet Coil	<b>High Speed</b> Dry / Wet Coil	Low Speed Dry / Wet Coil
.00 (0)	800 / 845 (0.38 / 0.40)	1160 / 1095 (0.55 / 0.52)	790 / 780 (0.37 / 0.37)	1565 / 1500 (0.74 / 0.71)	1370 / 1330 (0.65 / 0.63)	1825 / 1660 (0.86 / 0.78)	1330 / 1200 (0.63 / 0.57)
.10 (25)	830 / 780 (0.39 / 0.37)	1115 / 1060 (0.53 / 0.50)	775 / 760 (0.36 / 0.35)	1470 / 1380 (0.69 / 0.65)	1285 / 1240 (0.61 / 0.59)	1740 / 1570 (0.82 / 0.74)	- / -
.20 (50)	780 / 720 (0.37 / 0.34)	1070 / 1000 (0.50 / 0.47)	760 / 740 (0.35 / 0.35)	1360 / 1285 (0.64 / 0.61)	1200 / 1160 (0.57 / 0.55)	1660 / 1500 (0.78 / 0.71)	- / -
.30 (75)	710 / 640 (0.33 / 0.30)	1000 / 915 (0.47 / 0.43)	- / -	1250 / 1160 (0.59 / 0.55)	1120 / 1080 (0.53 / 0.51)	1550 / 1400 (0.73 / 0.66)	- / -
.40 (100)	640 / 560 (0.30 / 0.26)	925 / 830 (0.44 / 0.39)	- / -	1140 / 1065 (0.54 / 0.50)	- / -	1470 / 1330 (0.69 / 0.63)	- / -

Above data is with 1" (25mm) standard disposable filter and 1" (25mm) washable filter.  
 For optional 2" (51mm) pleated filter - reduce ESP by .15" (37.33Pa).  
 See installation instructions for maximum ESP information on various KW application.

Speeds marked "**bold**" above are **Factory Connected**.

### Electric Heat Table - Refer to Electrical Specifications for Availability by Unit Model

Model	W24A1-D		W24A1-F W24L1-F		W30A1-D W36A1-D		W36A1-E		W30A1-F W36A1-F W36L1-F		W42A1-E W48A1-E W60A1-E		W42A1-F, W42L1-F W48A1-F, W48L1-F W60A1-F, W60L1-F W70A1-P, W70L1-P	
	240V-1 WATTS	220V-1 WATTS	415V-3 WATTS	380V-3 WATTS	240V-1 WATTS	220V-1 WATTS	220V-3 WATTS	200V-3 WATTS	415V-3 WATTS	380V-3 WATTS	220V-3 WATTS	200V-3 WATTS	415V-3 WATTS	380V-3 WATTS
5.0	5011	4220	4484	3751	5011	4220								
8.0	8011	6721												
10.0					9994	8411								
6.0							5041	4161						
7.0									6740	5656			6740	5660
9.0											7562	6213		
12.0							10082	8323	11178	9408				
14.0													13450	11280
15.0											12603	10345		

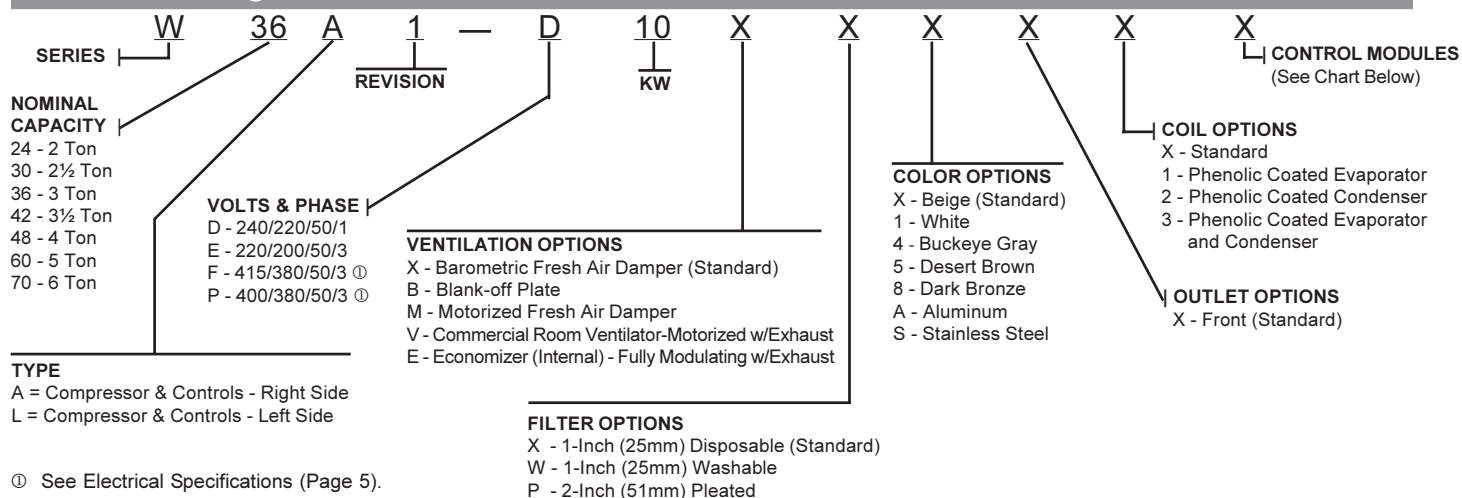
## Cooling Application Data - Outdoor Temperature ①

Model	DB/WB②	Cooling Capacity	OUTDOOR TEMPERATURE ②					
			75°F (23.9°C)	85°F (29.4°C)	95°F (35.0°C)	105°F (40.6°C)	115°F (46.1°C)	125°F (51.7°C)
W24A W24L	75/62°F (23.9/16.7°C)	Total Sensible	22,900 (6.71) 17,700 (5.18)	20,600 (6.03) 16,900 (4.95)	18,400 (5.39) 16,200 (4.74)	16,900 (4.95) 15,400 (4.51)	15,500 (4.54) 14,500 (4.25)	14,700 (4.30) 13,500 (3.95)
	80/67°F (26.7/19.4°C)	Total Sensible	24,400 (7.14) 17,200 (5.04)	22,800 (6.68) 16,800 (4.92)	21,200 (6.21) 16,300 (4.77)	19,800 (5.80) 15,700 (4.60)	18,700 (5.48) 15,000 (4.39)	17,800 (5.21) 14,200 (4.16)
W30A	75/62°F (23.9/16.7°C)	Total Sensible	27,600 (8.08) 21,600 (6.33)	25,000 (7.32) 20,700 (6.06)	22,600 (6.62) 19,800 (5.80)	20,700 (6.06) 18,800 (5.51)	19,100 (5.59) 17,700 (5.18)	17,900 (5.24) 16,700 (4.89)
	80/67°F (26.7/19.4°C)	Total Sensible	29,400 (8.61) 20,900 (6.12)	27,700 (8.11) 20,500 (6.00)	26,000 (7.61) 19,900 (5.83)	24,400 (7.14) 19,200 (5.62)	23,000 (6.73) 18,400 (5.39)	21,800 (6.38) 17,600 (5.15)
W36A W36L	75/62°F (23.9/16.7°C)	Total Sensible	33,600 (9.84) 25,100 (7.35)	30,100 (8.81) 23,900 (7.00)	27,200 (7.96) 22,800 (6.68)	25,200 (7.38) 21,800 (6.38)	23,700 (6.94) 20,900 (6.12)	22,900 (6.71) 20,100 (5.89)
	80/67°F (26.7/19.4°C)	Total Sensible	35,800 (10.48) 24,300 (7.12)	33,300 (9.75) 23,600 (6.91)	31,200 (9.14) 22,900 (6.71)	29,700 (8.70) 22,300 (6.53)	28,600 (8.37) 21,700 (6.35)	27,900 (8.17) 21,200 (6.21)
W42A W42L	75/62°F (23.9/16.7°C)	Total Sensible	38,400 (11.24) 31,300 (9.17)	34,900 (10.22) 29,600 (8.67)	31,500 (9.22) 28,000 (8.20)	28,300 (8.29) 26,500 (7.76)	25,300 (7.41) 25,000 (7.32)	23,500 (6.88) 23,500 (6.88)
	80/67°F (26.7/19.4°C)	Total Sensible	41,00 (12.01) 30,300 (8.87)	38,700 (11.33) 29,400 (8.61)	36,000 (10.54) 28,300 (8.29)	33,400 (9.78) 27,200 (7.96)	30,400 (8.90) 26,000 (7.61)	27,200 (7.96) 24,700 (7.23)
W48A W48L	75/62°F (23.9/16.7°C)	Total Sensible	43,700 (12.80) 35,200 (10.31)	39,700 (11.63) 33,700 (9.87)	36,000 (10.54) 32,100 (9.40)	32,700 (9.58) 30,400 (8.90)	29,400 (8.61) 28,800 (8.43)	27,100 (7.94) 27,100 (7.94)
	80/67°F (26.7/19.4°C)	Total Sensible	46,600 (13.65) 34,100 (9.99)	44,100 (12.91) 33,300 (9.75)	41,500 (12.12) 32,300 (9.46)	38,500 (11.27) 31,200 (9.14)	35,200 (10.31) 30,000 (8.78)	31,800 (9.31) 28,500 (8.35)
W60A W60L	75/62°F (23.9/16.7°C)	Total Sensible	52,100 (15.26) 39,800 (11.65)	47,000 (13.76) 37,300 (10.92)	42,200 (12.36) 35,000 (10.25)	38,000 (11.13) 32,900 (9.63)	34,000 (9.96) 30,800 (9.02)	30,500 (8.93) 29,000 (8.49)
	80/67°F (26.7/19.4°C)	Total Sensible	55,700 (16.31) 38,600 (11.30)	52,100 (15.26) 36,900 (10.81)	48,500 (14.17) 35,300 (10.34)	44,800 (13.12) 33,800 (9.90)	41,000 (12.00) 32,100 (9.40)	37,100 (10.86) 30,500 (8.93)
W70A W70L	75/62°F (23.9/16.7°C)	Total Sensible	65,300 (19.12) 46,700 (13.67)	58,300 (17.07) 44,000 (12.88)	52,100 (15.26) 41,100 (12.04)	46,800 (13.70) 38,400 (11.24)	42,200 (12.36) 35,700 (10.45)	38,200 (11.19) 32,900 (9.63)
	80/67°F (26.7/19.4°C)	Total Sensible	69,700 (20.41) 45,300 (13.27)	64,700 (18.95) 43,500 (12.74)	59,000 (17.28) 41,500 (12.15)	55,200 (16.16) 39,400 (11.54)	50,700 (14.85) 37,100 (10.86)	46,400 (13.59) 34,600 (10.13)

① Below 65°F (18.3C), unit requires a factory or field installed low ambient control.

② Return air temperature.

# Air Conditioning Wall-Mount Model Nomenclature



## Ventilation Options

Models	W24A1 W24L1		W30A1 W36A1, W36L1		W42A1, W48A1, W60A1, W70A1 W42L1, W48L1, W60L1, W70L1	
	Factory Installed Code No.	Field Installed Part No.	Factory Installed Code No.	Field Installed Part No.	Factory Installed Code No.	Field Installed Part No.
Barometric Fresh Air Damper	X	BFAD-2	X	BFAD-3	X	BFAD-5
Blank-Off Plate	B	BOP-2	B	BOP-3	B	BOP-5
Motorized Fresh Air Damper	M	MFAD-2	M	MFAD-3	M	MFAD-5
Commercial Ventilator - Motorized	V	CRV-2	V	CRV-3	V	CRV-5
Economizer (Internal) - Fully Modulating ①	E	EIFM-2B	E	EIFM-3C	E	EIFM-5C

① Low ambient control is required with economizer for low temperature compressor operation.

## Air Conditioning Control Modules

Air Conditioning Control Modules								All Models Except As Noted	
HPC ①	LPC ②	CCM ③	LAC ④	ALR ⑤	SK ⑥	SK ⑦	DDC ⑧	Factory Installed Code	Field Installed Part
STD	STD	STD						X	N/A
STD	STD	STD	●					E	CMA-28
STD	STD	STD	●	●				J	Factory Only
STD	STD	STD	●		●			K	CMC-15 and CMA-28
STD	STD	STD	●	●	●			M	Factory Only
STD	STD	STD			●			Field Installed Only	CMC-15
STD	STD	STD	●	●			●	V ⑨	Factory Only
STD	STD	STD					●	Field Installed Only	CMA-23 for W18-36A CMA-24 for W42-70A
STD	STD	STD				●		Field Installed Only	SK111

STD = Standard equipment all models.

① HPC. High pressure control is auto reset. Always used with compressor control module (CCM) which is included. See note ③.

② LPC. Low pressure control is auto reset. Always used with compressor control module (CCM) which is included. See note ③.

③ CCM. Compressor control module has adjustable 30-second to 5-minute delay-on-break timer. On initial power-up, or any time the power is interrupted, the delay-on-make will be 2 minutes plus 10% of the delay-on-break setting. There is no delay-on-make during routine operation of the unit. The module also provides the lockout feature (with 1 retry) for high and/or low-pressure controls, and a 2-minute timed bypass for low-pressure control.

④ LAC. Low ambient control permits cooling operation down to 0°F (-17.7°C)

⑤ ALR. The alarm relay has a set of normally open and normally closed dry contacts to provide the ability to signal a condition of shutdown on either high or low pressure controls.

⑥ SK. PTCSR start kit can be used with all -A single phase models. Increases starting torque 2-3x. Not used for -E, -F or -P three phase models. Do not use if SK111 is used.

⑦ SK. Start capacitor and potential relay start kit can be used with all -A single phase models. Increases starting torque 9x. Not used for -E, -F or -P three phase models. Do not use if CMC-15 is used.

⑧ DDC. Incorporates 4 additional sensors: discharge air temperature, indoor blower airflow, compressor current, and dirty filter. These sensing devices function to input analog data such as temperature, as well as digital data such as airflow, compressor status or filter status.

⑨ "V" control module should be ordered in conjunction with direct digital controller (DDC) model TCS24. Refer to DDC specification sheet S3280 for more information.



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Form No.  
 S3408  
 October, 2011

Supersedes: S3408-710